IN THE CLAIMS:

1-35. (Cancelled)

36. (Previously Presented) A system for forming a protective layer on a plasma display panel comprising;

a vacuum chamber housing,

means for supporting a plasma display panel substrate with electrodes in the housing;

means for heating the plasma display panel substrate;

means for evaporating, from a source of magnesium oxide, a predetermined amount of magnesium oxide to provide the protective layer on the plasma display panel substrate; and

an electron gun aligned with the means for supporting for evaporating magnesium oxide, as applied to the plasma display panel substrate, to provide a single layer of a (110)-face orientation of sufficient thickness to provide sputtering resistance during a predetermined life term of the plasma display panel.

37. (Previously Presented) The system of Claim 36 wherein the plasma display panel substrate is heated to a temperature of 150°C and the magnesium oxide is applied to a thickness of 5000 A° for the protective layer.